I. Wisconsin State Natural Areas Program

A. Program history

Prior to European settlement, Wisconsin contained a mosaic of natural communities, ranging from prairies and oak savannas in the south, to pine forests and boggy wetlands in the north. In all, more than 75 unique types of natural communities made up Wisconsin's landscape of the early 1800s. Over the decades since intensive settlement began, the quality and extent of those communities have been extremely reduced by urbanization, agriculture, and industry, and by the ecological impact of fire suppression and the spread of exotic plant species. The last remaining vestiges of our native landscape are called natural areas. They harbor natural features essentially unaltered by human-caused disturbances or that have substantially recovered from disturbance over time.

We owe much to Wisconsin's early conservationists of the 1930s, 40s, and 50s – including Aldo Leopold, botanists Norman Fassett and Albert Fuller, and plant ecologist John Curtis – who recognized the importance of natural areas and the consequences of their loss. Under their guidance, the State Board for the Preservation of Scientific Areas was created in 1951 as the first state-sponsored natural area protection program in the nation. That first board evolved into today's State Natural Areas (SNA) program.

B. Preserving our natural legacy

The SNA Program is located in the Department of Natural Resources' Bureau of Natural Heritage Conservation and advised by the Natural Areas Preservation Council, an 11-member group of scientists and conservationists. In 2019, the SNA program has grown to almost 700 sites encompassing 402,000 acres of land and water. SNAs are found in 70 of Wisconsin's 72 counties and range in size from less than one acre to more than 7,700 acres.

SNAs protect outstanding examples of native natural communities, significant geological formations, and archaeological sites. They harbor natural features essentially unaltered by human-caused disturbances or that have substantially recovered from disturbance over time. SNAs also provide the last refuges in Wisconsin for rare plants and animals. In fact, more than 90% of the plants and 75% of the animals on Wisconsin's list of endangered and threatened species are protected on SNAs.

C. SNA establishment and protection

The process to establish a SNA begins with the evaluation of a site identified through field inventories conducted by DNR ecologists. Assessments take into account a site's overall quality and diversity, extent of past disturbance, long-term viability, context within the greater landscape, and rarity of features on local and global scales. Sites are considered for potential SNA designation in one or more of the following categories:

- Outstanding natural community;
- Critical habitat for rare species;
- Ecological benchmark area;
- Significant geological or archaeological feature; and/or

- Exceptional site for natural area research and education.

Site protection is accomplished by several means, including land acquisition from willing sellers, donations, conservation easements, and cooperative agreements. Sites on existing DNR-owned lands, such as State Parks and Wildlife Areas, are established as SNAs through the master planning process. Areas owned by other government agencies, educational institutions, and private conservation organizations are brought into the natural areas system by formal agreements between the DNR and the landowner. The SNA program owes much of its success to agreements with partners like The Nature Conservancy, USDA Forest Service, National Park Service, conservation organizations and county governments. High priority sites on private land are often acquired by partners and help fill gaps in the natural area system.

Once secured by purchase or agreement, sites are formally "designated" as SNAs and become part of the natural area system. Designation confers a significant level of land protection through state statutes, administrative rules, and guidelines. A higher level of protection is afforded by legal "dedication" of SNAs through Articles of Dedication, a special kind of perpetual conservation easement.

Our future may well depend on the preservation of biological diversity such as that protected in SNAs. Protected natural communities and their thousands of plant and animal species are irreplaceable genetic reservoirs of potential benefit to humans and are important in their own right. SNAs are vital to scientific research because they provide some of the best examples of natural processes acting over time with minimal human interference. They are valuable benchmarks against which we can judge the impact of our society on Wisconsin's natural landscape.

D. SNA management and use

Land stewardship is guided by principles of ecosystem management. For some SNAs, the best management prescription is to "let nature take its course" and allow natural processes and their subsequent effects, to proceed without constraint. However, some processes, such as the encroachment of woody vegetation and the spread of invasive and exotic plant species, threaten the biological integrity of many SNAs. These sites require hands-on management and, in some cases, the reintroduction of natural functions - such as prairie fires - that are essentially absent from the landscape.

Public use of SNAs is channeled in two directions: scientific research and compatible recreation. Natural areas serve as excellent outdoor laboratories for environmental education and formal research on natural communities and their component species. A permit issued by the DNR is required to conduct studies or collect specimens on SNAs. Natural areas are not appropriate for intensive recreation such as camping or mountain biking, but they can accommodate low-impact activities such as hiking, bird watching and nature study. As such, many SNAs contain few or no amenities such as parking areas, restrooms, or maintained trails.

E. Now and the future

Since human evolution over time was largely in a natural world, our future may well depend on the preservation of biological diversity such as that protected in SNAs. Protected natural communities and their thousands of plant and animal species are irreplaceable genetic reservoirs of potential benefit to humans and are important in their own right. SNAs are vital to scientific research because they provide some of the best examples of natural processes acting over time with minimal human interference. They are valuable benchmarks against which we can judge the impact of our society on Wisconsin's natural landscape.

F. For more information

The SNA Program publishes Wisconsin, naturally, a 184-page, full-color guidebook containing maps, location information, and descriptions for 150 of Wisconsin's best SNAs. For information about purchasing the guidebook, or about the SNA program in general, contact us at the address below. The program's website is also an excellent source of current information on SNAs and the DNR's Bureau of Natural Heritage Conservation.

State Natural Areas Program
Bureau of Natural Heritage Conservation
Wisconsin Dept. of Natural Resources
P.O. Box 7921
Madison, WI 53707-7921
Website: dnr.wi.gov/topic/lands/naturalareas/